FIG 1

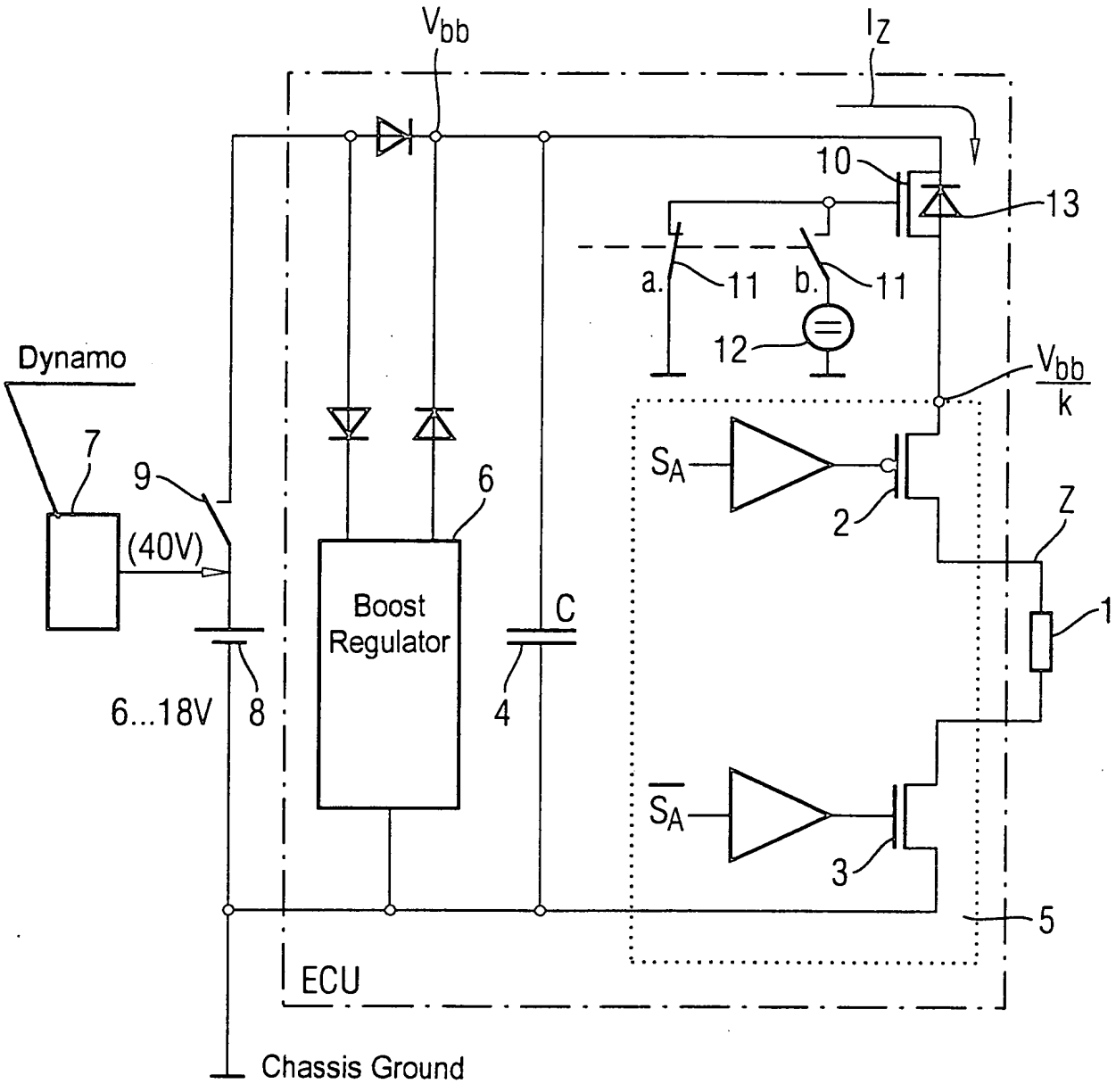
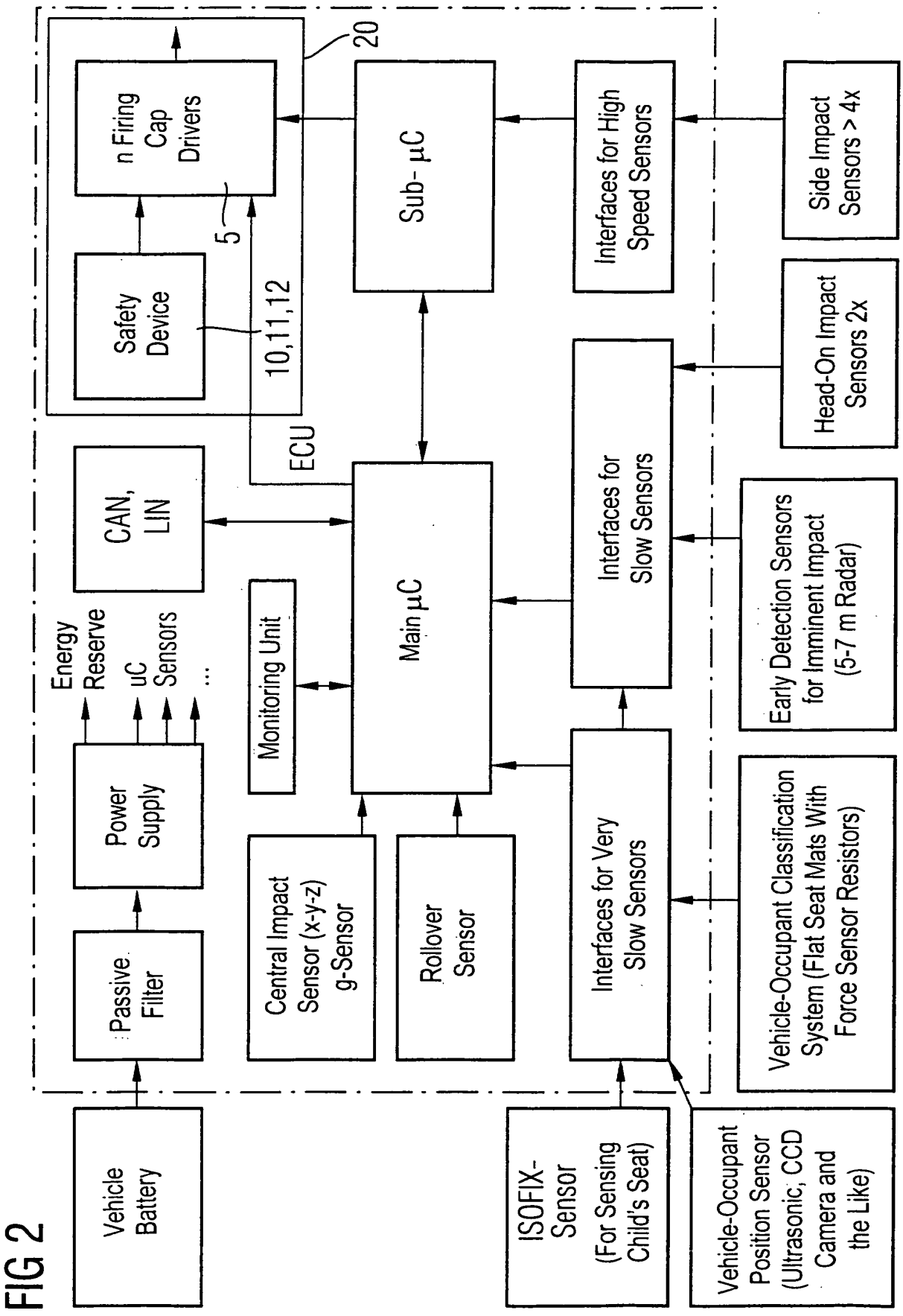

Vbb
Iz
10
13
a.
11
b.
11
12
Dynamo
7
9
(40V)
6...18V
8
6
Boost
Regulator
C
4
SA
2
Vbb
k
Z
1
SA
3
5
ECU
Chassis Ground

FIG 2


Vehicle Battery
Passive Filter
Power Supply
Energy Reserve
uC
Sensors
...
CAN, LIN
Monitoring Unit
Central Impact Sensor (x-y-z) g-Sensor
Rollover Sensor
Main µC
Sub- µC
ECU
20
n Firing Cap Drivers
Safety Device
5
10,11,12
Interfaces for High Speed Sensors
Interfaces for Slow Sensors
Interfaces for Very Slow Sensors
Side Impact Sensors > 4x
Head-On Impact Sensors 2x
Early Detection Sensors for Imminent Impact (5-7 m Radar)
Vehicle-Occupant Classification System (Flat Seat Mats With Force Sensor Resistors)
ISOFIX-Sensor (For Sensing Child's Seat)
Vehicle-Occupant Position Sensor (Ultrasonic, CCD Camera and the Like)

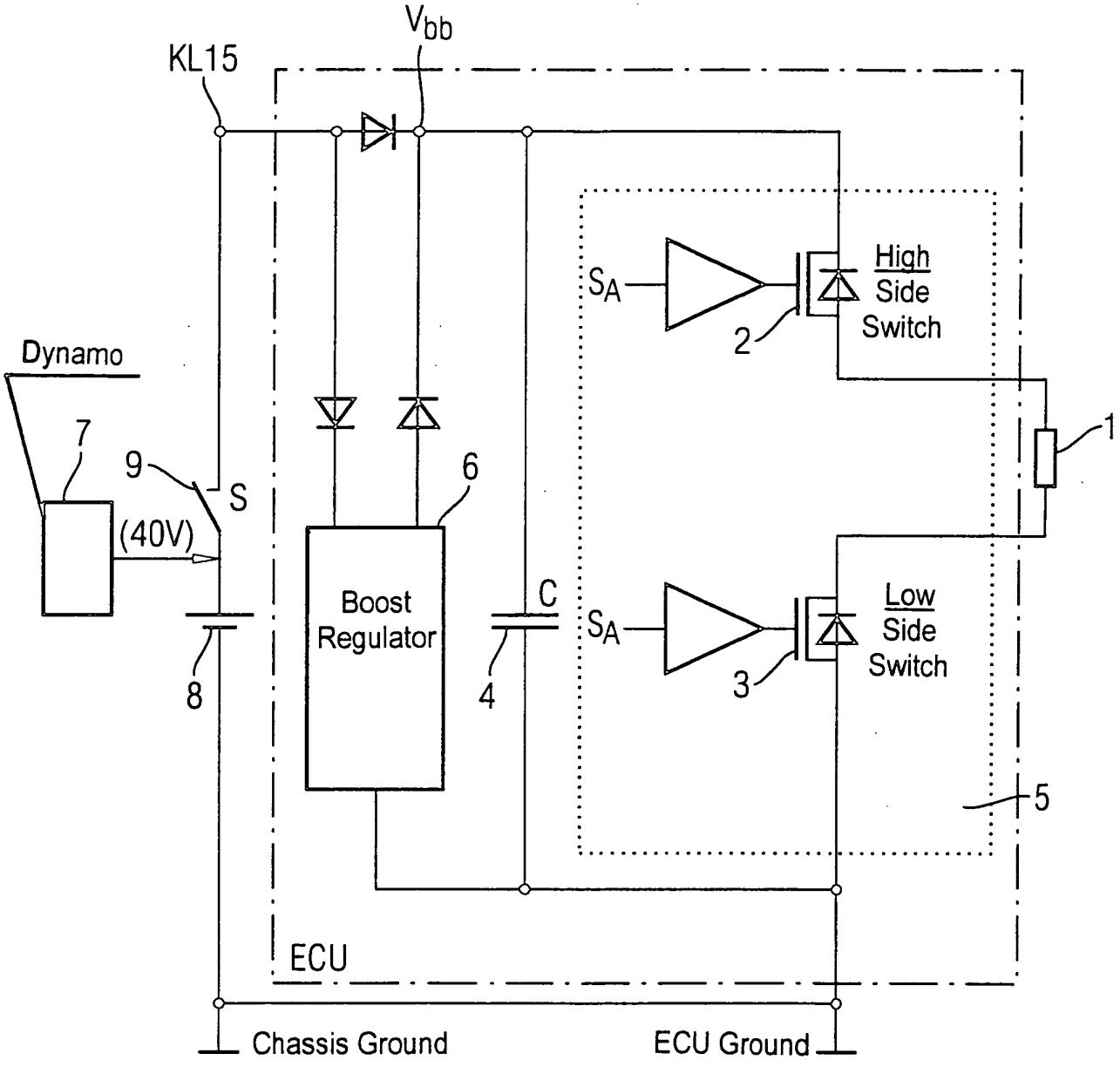



FIG 3
PRIOR ART